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*Via Electronic Submission*

January 29, 2011

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12th Street, S.W.  
Washington, D.C. 20554

**Re: Notice of Oral *Ex Parte* Communication  
PS Docket No. 06-229**

Dear Ms. Dortch:

This letter is to inform you that on the afternoon of January 27, 2011, Layer 2 Connections, LLC ("Layer 2 Connections") representatives Marcus Le Maitre, Principal, Susan Nelson, Managing Principal and I met in person in Washington DC with FCC Public Safety and Homeland Security Bureau (PSHSB) representatives (James Arden Barnett, Jr, Jennifer Manner, David Furth, Tom Beers, Gene Fullano, Eric Ehrenreich, Aaron Garza, Susan McLean, David Siehl, Brian Hurley, and Ashley Burton), and Office of Engineering and Technology representatives (Michael Ha, Walter Johnston).

Layer 2 Connections discussed ways in which the safety and productivity of first responders might be improved. We described how multiple similar or dissimilar networks – whether wired, wireless or satellite – can be connected together to act and behave as one in order to increase the resilience, availability and quantity of bandwidth to users. We described this capability as a Virtual Wide Area Network (VWAN). We explained how this can happen in two ways:

1. Multiple networks can be used serially by prioritizing a preferred network for use, with others in "hot standby". If the preferred network becomes unavailable or unable to support the type of communications being executed then handoff can be performed seamless to a secondary, tertiary or other network based on a user-definable policy. If a more preferred network becomes available or its performance improves such that it more suitable then communications can once again be seamlessly switched to use it.

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2. Multiple similar and/or dissimilar networks can be bonded together so that the aggregated bandwidth of each is made available for all applications and services based on user-definable policies. Applications and protocols can be prioritized and shaped over the bonded networks ensuring that quality of service can be maintained.

The capabilities described in 1. and 2. can be improved when key performance metrics such as available bandwidth, latency, jitter and packet loss are used, in addition to user-defined policy to determine how and when networks are used and for what protocols, applications and services they are suited.

Layer 2 Connections described how these features aligned with Chief Barnett's recommendations<sup>i</sup> for roaming between the future 700 MHz Public Safety network and commercial wireless networks:

*"...the public safety network must be able to expand its capacity to deal with extreme circumstances. For that reason, the FCC recommended that public safety be able to roam over to commercial networks with priority access..."*

Layer 2 Connections described how the quality and quantity of wireless data bandwidth available to public safety users can be significantly enhanced by allowing them to simultaneously or serially connect to one or multiple 3<sup>rd</sup> party networks in addition to the 700 MHz Public Safety Broadband network. Layer 2 Connections suggested that these capabilities would ease the future challenges to be faced by those who migrate from existing systems to the public safety broadband network.

Layer 2 Connections referenced a prior FCC discussion, available at the following link:  
<http://fjallfoss.fcc.gov/ecfs/comment/view?z=zcm1x&id=6016062996>.

The meeting included a demonstration of the capabilities described above using a Virtual Wide Area Networking (VWAN) technology platform. The demonstration also highlighted how the platform created virtual wide area networks that maximized the interoperability between jurisdictions in situations of mutual aid. The attached presentation was used for reference.

Layer 2 Connections is a small, woman-owned business based in North Carolina with experience serving the public safety community with voice and data communications.

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Ms. Marlene Dortch, FCC  
January 29, 2011  
Layer 2 Connections, LLC  
Ex Parte Notice  
Page 3 of 3

If you have any questions or comments regarding this notice, please do not hesitate to contact me.

Sincerely,



Pascal de Hesselle  
Principal  
Layer 2 Connections, LLC

Attachment

CC (via email):

[Jamie.Barnett@fcc.gov](mailto:Jamie.Barnett@fcc.gov)  
[Jennifer.Manner@fcc.gov](mailto:Jennifer.Manner@fcc.gov)  
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<sup>i</sup> Statement of James Arden Barnett, Jr., Chief, Public Safety and Homeland Security Bureau, Federal Communications Commission. "Keeping Us Safe: The Need for a Nationwide Public Safety Network." Presented before the U.S. Senate Committee on Commerce, Science, and Transportation. September 23, 2010.

